

**IFWO** 

RAW SEQUENCE LISTING

DATE: 08/13/2004 TIME: 12:25:13

PATENT APPLICATION: US/10/659,324A

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\08132004\J659324A.raw

- 3 <110> APPLICANT: Birger Sorensen
- 5 <120> TITLE OF INVENTION: Method of Producing an HIV-1 Immune Response
- 7 <130> FILE REFERENCE: 02833.4001LO
- 9 <140> CURRENT APPLICATION NUMBER: US 10/659,324A
- 10 <141> CURRENT FILING DATE: 2003-09-11
- 12 <150> PRIOR APPLICATION NUMBER: US 09/674,674
- 13 <151> PRIOR FILING DATE: 2001-07-25
- 15 <160> NUMBER OF SEQ ID NOS: 49
- 17 <170> SOFTWARE: PatentIn Ver. 3.1
- 19 <210> SEQ ID NO: 1
- 20 <211> LENGTH: 20
- 21 <212> TYPE: PRT
- 22 <213> ORGANISM: artificial sequence
- 24 <220> FEATURE:
- 26 <223> OTHER INFORMATION: synthetic peptide
- 28 <220> FEATURE:
- 30 <221> NAME/KEY: VARIANT
- 31 <222> LOCATION: 1
- 32 <223> OTHER INFORMATION: Xaa in position 1 is Lys or Arq
- 34 <220> FEATURE:
- 36 <221> NAME/KEY: VARIANT
- 37 <222> LOCATION: 2
- 38 <223> OTHER INFORMATION: Xaa in position 2 is Ala, Gly, Ser or Arg
- 40 <220> FEATURE:
- 42 <221> NAME/KEY: VARIANT
- 43 <222> LOCATION: 3
- 44 <223> OTHER INFORMATION: Xaa in position 3 is Leu or Met
- 46 <220> FEATURE:
- 48 <221> NAME/KEY: VARIANT
- 49 <222> LOCATION: 4
- 50 <223> OTHER INFORMATION: Xaa in position 4 is Gly or Arg
- 52 <220> FEATURE:
- 54 <221> NAME/KEY: VARIANT
- 55 <222> LOCATION: 5
- 56 <223> OTHER INFORMATION: Xaa in position 5 is Pro, Thr, Val, Ser, Gln or Ala
- 58 <220> FEATURE:
- 60 <221> NAME/KEY: VARIANT
- 61 <222> LOCATION: 6
- 62 <223> OTHER INFORMATION: Xaa in position 6 is Gly, Ala, Lys, Arg, Gln or Glu
- 64 <220> FEATURE:
- 66 <221> NAME/KEY: VARIANT
- 67 <222> LOCATION: 8
- 68 <223> OTHER INFORMATION: Xaa in position 8 is Thr or Ser





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RAW SEQUENCE LISTING

139 Gln Gly Val Gly

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Input Set: A:\sequence listing.txt
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213 <223> OTHER INFORMATION: Xaa in position 14 is Gly or missing

211 <221> NAME/KEY: VARIANT 212 <222> LOCATION: 14

## RAW SEQUENCE LISTING DATE: 08/13/2004 PATENT APPLICATION: US/10/659,324A TIME: 12:25:13 Input Set : A:\sequence listing.txt Output Set: N:\CRF4\08132004\J659324A.raw 216 <220> FEATURE: 218 <221> NAME/KEY: VARIANT 219 <222> LOCATION: 15 220 <223> OTHER INFORMATION: Xaa in position 15 is Arg or Lys 222 <220> FEATURE: 224 <221> NAME/KEY: VARIANT 225 <222> LOCATION: 16 226 <223> OTHER INFORMATION: Xaa in position 16 is Met or Leu 228 <220> FEATURE: 230 <221> NAME/KEY: VARIANT 231 <222> LOCATION: 18 232 <223> OTHER INFORMATION: Xaa in position 18 is Ser, Cys or Gln 234 <220> FEATURE: 236 <221> NAME/KEY: VARIANT 237 <222> LOCATION: 20 238 <223> OTHER INFORMATION: Xaa in position 20 is Thr, Val, Ile, Ser or Ala 240 <220> FEATURE: 242 <221> NAME/KEY: VARIANT 243 <222> LOCATION: 21 244 <223> OTHER INFORMATION: Xaa in position 21 is Ser, Gly or Thr 246 <220> FEATURE: 248 <221> NAME/KEY: VARIANT 249 <222> LOCATION: 24 250 <223> OTHER INFORMATION: Xaa in position 24 is Asp, Glu, Cys or Gly 252 <220> FEATURE: 254 <221> NAME/KEY: VARIANT 255 <222> LOCATION: 25 256 <223> OTHER INFORMATION: Xaa in position 25 is Gly or missing 259 <400> SEQUENCE: 4 W--> 260 Xaa Xaa Xaa Xaa Xaa Gly Leu Asn Pro Leu Val Xaa Xaa Xaa Xaa 5 W--> 263 Tyr Xaa Pro Xaa Xaa Ile Leu Xaa Xaa 264 20 266 <210> SEQ ID NO: 5 267 <211> LENGTH: 24 268 <212> TYPE: PRT 269 <213> ORGANISM: artificial sequence 271 <220> FEATURE: 273 <223> OTHER INFORMATION: synthetic peptide 275 <220> FEATURE: 277 <221> NAME/KEY: DISULFID 278 <222> LOCATION: 23 279 <223> OTHER INFORMATION: disulfide, optional, can form homodimer with another SEQ ID NO 5 or a heterodimer with SEQ ID NO 2 283 <400> SEQUENCE: 5 284 Trp Ile Ile Pro Gly Leu Asn Pro Leu Val Gly Gly Lys Leu Tyr

5

287 Ser Pro Thr Ser Ile Leu Cys Gly

285 1

288

# RAW SEQUENCE LISTING PATENT APPLICATION: US/10/659,324A DATE: 08/13/2004 TIME: 12:25:13

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\08132004\J659324A.raw

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     292 <212> TYPE: PRT
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     303 Tyr Ser Pro Thr Ser Ile Leu Gly
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     307 <211> LENGTH: 23
     308 <212> TYPE: PRT
     309 <213> ORGANISM: artificial sequence
     311 <220> FEATURE:
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     315 <400> SEQUENCE: 7
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                                              10
     319 Ser Pro Thr Ser Ile Leu Gly
     320
                    20
     322 <210> SEO ID NO: 8
     323 <211> LENGTH: 23
     324 <212> TYPE: PRT
     325 <213> ORGANISM: artificial sequence
     327 <220> FEATURE:
     329 <223> OTHER INFORMATION: synthetic peptide
     331 <400> SEQUENCE: 8
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                                              10
     335 Ser Pro Thr Thr Ile Leu Gly
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     339 <211> LENGTH: 27
     340 <212> TYPE: PRT
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     351 <223> OTHER INFORMATION: Xaa in position 1 is Asn, Ser, Gly, His, Ala, Pro, Arg or
missing
     353 <220> FEATURE:
     355 <221> NAME/KEY: VARIANT
     356 <222> LOCATION: 2
     357 <223> OTHER INFORMATION: Xaa in position 2 is Asn, Ala or Lys
     359 <220> FEATURE:
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361 <221> NAME/KEY: VARIANT

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/13/2004 PATENT APPLICATION: US/10/659,324A TIME: 12:25:14

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\08132004\J659324A.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:1; Xaa Pos. 1,2,3,4,5,6,8,9,14,15,16,17,18,20
Seq#:4; Xaa Pos. 1,2,3,4,5,12,13,14,15,16,18,20,21,24,25
Seq#:9; Xaa Pos. 1,2,3,7,8,9,10,11,12,14,15,16,17,18,19,20,21,22,23,24,25
Seq#:9; Xaa Pos. 26,27
Seq#:15; Xaa Pos. 1,2,5,6,7,8,9,11,13,14,15,16,17,18,19,20,21,22,23,24,25
Seq#:15; Xaa Pos. 26,27,28,29,30,31
Seq#:16; Xaa Pos. 6,21
Seq#:17; Xaa Pos. 6
Seq#:18; Xaa Pos. 6
Seq#:19; Xaa Pos. 5
Seq#:20; Xaa Pos. 5
Seq#:25; Xaa Pos. 5,20
Seq#:32; Xaa Pos. 21,22
Seq#:33; Xaa Pos. 11
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### Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 132
Seq#:5; Line(s) 279

### VERIFICATION SUMMARY

DATE: 08/13/2004 PATENT APPLICATION: US/10/659,324A TIME: 12:25:14

Input Set : A:\sequence listing.txt Output Set: N:\CRF4\08132004\J659324A.raw

L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0 L:116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16 L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16 L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0 L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:16 L:752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0 L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16 L:786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 L:789 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:16  $L\!:\!814$   $M\!:\!341$   $W\!:\!$  (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 L:858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  $L:889\ M:300\ W:$  (50) Intentionally skipped Sequence, : Sequence Id (21) SEQUENCE: L:894 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (22) SEQUENCE: L:899 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (23) SEQUENCE: L:951 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0 L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16 L:1066 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16 L:1098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0